



CALL FOR PAPERS

IEEE TRANSACTIONS OF SMART GRID

Special Issue on Smart DC Distribution Systems

With rapid development of power electronics systems, development of modern control paradigms, and DC nature of most renewable energy sources and storage units, DC microgrids and distribution systems are becoming a viable alternative as they perform better in terms of efficiency, scalability, and stability. The objective of this special issue are to disseminate state-of-the-art R&D results on Smart DC Distribution Systems, and bring together researchers from academia, industries, and government to foster interactions among stakeholders. We seek original papers that offer novel research contributions, as well as seminal survey papers that have archival values. Topics of interest include, but are not limited to:

- Topological studies of power-electronics DC/AC/DC conversion stage
- Distributed monitoring, estimation, and control strategies of DC systems
- DC microgrid interfacing issues for storage units and renewable energy sources
- Stability issues for power electronics-intensive DC microgrids
- DC distribution architectures in smart residential buildings
- DC zonal distribution systems in shipboard power systems and more electric aircrafts
- Energy management solutions for distributed storage in DC networks
- Power quality issues in DC distribution systems
- DC distribution structures in telecommunication systems and datacenters
- Virtual prototyping and real-time simulation environments for DC recourses
- Cooperative and competitive control frameworks for local area DC power networks
- Sensor-intensive peer-to-peer energy routing for vehicular storage units
- Distribution level HVDC systems
- Pedagogical aspects and educational opportunities in DC distribution systems
- Planning, demonstration, marketing, policies, and standard issues for DC microgrids

Submission Guidelines

This special issue solicits original work that is not under consideration for publication in other venues. Two-page extended abstracts are solicited for the first round of reviews. Authors of selected abstracts will be invited to submit the full papers in the second round. Authors must refer to the IEEE Transactions on Smart Grid author guidelines at <http://www.ieee-pes.org/publications/information-for-authors> for information on content and formatting of submissions. Please submit a PDF version of the abstracts, by April 15, 2013, including a cover letter with authors' contact information via e-mail to joz@et.aau.dk.

Important Dates

April 15th, 2013: Deadline to submit extended abstracts (two IEEE pages)

May 15th, 2013: Completion of the first round of review

August 1st, 2013: Deadline to submit full papers (eight IEEE pages) for review

March 15th, 2014: Final notification for authors

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